

## **River Herring (RH) Technical Expert Working Group (TEWG)**

<http://www.greateratlantic.fisheries.noaa.gov/protected/riverherring/tewg/index.html>

### **Fisheries Subgroup**

#### **DRAFT Data Gaps and Conservation Ideas**

Co-Chairs: Jason Didden (MAFMC staff) and Mary Beth Tooley (NEFMC, Maine)

Last Updated August 29, 2014

### **Introduction**

The focus of this group is to consider the impacts from state and federal fisheries rangewide and help the TEWG meet its expected products (see the above website for additional information). The initial focus of the Fisheries Subgroup has been twofold: 1) identify fisheries-related river herring (alewife and blueback herring) data gaps and ideas to fill those data gaps where appropriate; and 2) identify potential fisheries-related conservation ideas for river herring (RH). Addressing fisheries-related data gaps (i.e. uncertainty in catches) will assist future attempts to accurately assess the state of RH populations and assist in identifying the scale of RH catches for conservation considerations. Generating conservation ideas could lead to additional ways to control catch of RH, which is likely to be an important part of overall RH conservation. For the purposes of this document, catch refers to all catch (targeted or incidental). Catch may be retained/landed or discarded. The word bycatch is generally avoided because it has a variety of common and legal usages which can lead to confusion. Since the TEWG cannot utilize consensus, at this time this document is a non-prioritized list of ideas from members of the Fisheries Subgroup, which may or may not be held in common by multiple group members. The group may utilize non-consensus methods to prioritize issues at a later time. The current ideas reflect an overarching need to enhance catch information from all fisheries to better understand impacts range-wide. This document also incorporates data gaps identified previously (e.g., NOAA Fisheries, Councils) and will continue to be updated to reflect ongoing subgroup and TEWG discussions.

Last Updated August 29, 2014

**I. Data Gaps – Focuses on catch (the relationship between catch and impact on stocks would be the primary domain of the TEWG Stock Status Subgroup)**

**Recreational U.S.**

-There are no comprehensive angler use and harvest survey techniques for use by Atlantic states with open or future fisheries to assess recreational harvest of RH.

-Because of limitations of Marine Recreational Information Program (MRIP) sampling, data are not generally collected in areas where recreational RH catch is most likely to occur (upper portions of tidal rivers). Given the current restrictions on recreational RH catch, this may not be considered a priority problem, but it could become a larger issue if recreational catch restrictions are relaxed and catches increase.

-The lack of Wave 1 (Jan-Feb) recreational sampling may be a data gap depending on RH migration patterns.

-Any recreational sampling could have species identification issues (whether self-reported or via samplers).

-It is uncertain how state sustainability plans should address monitoring provisions.

-It is unclear if recreational fishing of RH in reservoirs should be monitored/regulated because they may affect overall populations if some downstream escapement occurs. Likewise, managers might want/need monitoring of whether catch of RH below reservoirs is coming from anadromous or generally land-locked populations.

**Commercial U.S.**

-Historical RH catch data are likely incomplete and generally not separated by species. Being able to associate accurate catches by water body and species (and maybe gear) is likely to be important for future assessment and conservation activities.

-Species identification is an issue for all RH catch data except recent observer/port sampling data.

-The inability (so far) to associate ocean/coastal catch to natal rivers makes it difficult to prioritize conservation actions related to catch (retained or discarded). There is ongoing research on this topic.

-There is uncertainty regarding the consequences of interactions with ocean/coastal fisheries and populations in the rivers (this is a cross over issue with Stock Status Subgroup).

- Current levels of observer/port sampling do not result in accurate/precise estimates of catch (landings or discards).
- There is uncertainty about the ability of current portside sampling programs to continue given their current funding sources, but portside sampling is likely to be an efficient way to monitor RH catch in fisheries that retain most of their catch.
- Electronic reporting (tow-by-tow similar to study fleet) may have applicability for RH catch monitoring and/or predicting areas of high RH availability.
- Electronic monitoring for RH catch (tied to retention, slippage and dockside monitoring) may be an appropriate approach but has not been tested in the relevant fleets.
- Some mixed (bait) landings likely had and still have an unreported RH portion.
- The final disposition/recording of NJ/MA incidental catch allowance landings (must be discarded or personally used in NJ) is unclear.
- Observer effects may create problems with interpreting observer data from fisheries that interact with RH.
- Slippage (discarding on observed trips before catch is observed) may create problems with interpreting observer data from fisheries that interact with RH. The Councils have taken recent actions to monitor and reduce slippage.
- State fisheries are generally less represented in observer data and this could potentially impact catch estimates.
- A variety of factors may impact the decision to discard (e.g. market forces or regulations), which can affect the appropriate measures to address discarding.
- Studies to date have not conclusively determined if spatial/temporal patterns in incidental RH catch may make “hot spot” avoidance practicable, and have not incorporated environmental variables that may help predict areas of high RH availability.
- Biological data from catches should be collected in a systematic manner.

### **Canada**

- Some data exist for some areas but a literature search and greater interaction with Canada is needed to fully establish the extent of existing Canadian RH fisheries data, and by extension the relevant data gaps. Data gaps identified for the U.S. may likely extend to Canada such as the need to associate ocean/coastal catch to natal rivers.

## **II. Fishery-Related Conservation Ideas**

### **General U.S.**

Add river herring as stocks in the Atlantic herring and mackerel fisheries and ensure full federal conservation and management under the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

### **Recreational U.S.**

-Current/future recreational catch levels under state sustainability plans are unlikely to be problematic if properly monitored.

### **Commercial U.S**

-Consider applicability of full retention rules for fisheries that have RH incidental catch.

-Consider applicability of port-side sampling for RH monitoring (for fleets where RH are maintained).

-Establish a Federal Portside Sampling Program.

-Restrict commercial fishing effort in times and areas when it can be linked to stock decline/impediments to recovery.

-Complete the Omnibus Industry-Funded Observer Coverage Amendment. For fleets that interact with river herring, some sub-group members mentioned higher (up to 100%) observer coverage is needed while other members indicated that 100% coverage is necessary for the mid-water trawl fleets.

-Continue/expand voluntary RH catch avoidance programs (<http://www.umassd.edu/smast/bycatch/>, <http://www.squidtrawlnetwork.com/river-herring-avoidance-maps/>).

-Precautionary restrictions on incidental interactions should be considered on a case-by-case basis until stock status and catch can be more closely associated.

-Test potential for gear or other fishing behavior modifications to reduce incidental RH catch. Examples include researching possible vertical segregation of river herring in the water column and observing fish behavior in/near fishing gears. Any potential projects should fully evaluate the current literature to determine/justify the likely fruitfulness of such studies.

### **Canada**

-Additional collaboration with Canadian entities is needed to develop potential conservation ideas related to catch of RH in Canada.